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**REMARKS**

Claims 1-20 are pending in the application. Claims 1, 11 and 14 are amended herein. Applicant respectfully requests reconsideration in view of the amendments and the following remarks.

**1. Claim Amendments**

Claim 1 is amended herein in response to the objection in part 3 of the Office Action, by replacing “; and” with “, provided that”.

Claims 1, 11 and 14 are amended herein by deleting the adjective “not”. Deletion of this adjective is necessary for the claim to accurately reflect the invention. The relevant portion of Claim 1 now reads:

*a first predetermined time, of a duration to enable a re-connect of the disconnected slave device if the disconnected slave device is reconnected to the system before the measured elapsed time reaches the first predetermined time*

And the relevant portion of Claims 11 and 14 now read:

*a first predetermined time, of a duration to enable a re-connect of the disconnected slave device if reconnection of the disconnected slave device is detected before the measured elapsed time reaches the first predetermined time.*

**2. Response to Objection under MPEP 714.04**

In part 2 of the Office Action, Applicant's amendment to independent Claims 1, 11 and 14 in a previous Response is found non-compliant with MPEP 714.04. The

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MPEP 714.04 objection arises because (allegedly) Applicant did not discuss the novelty of the limitation: of a duration to enable a reconnect of the disconnected slave device.

The Office Action on page 2 then analyzes the Maeda reference and asserts that Maeda anticipates the amended limitation. First, Maeda is credited with *detecting* a time delay T2. Second, Maeda's T2+T3 is interpreted as anticipating "a predetermined time that enables a reconnection of a device after the disconnection." This analysis of Maeda is wholly inaccurate.

a. Maeda's time period T2 is not a detected time delay.

Contrary to the Office Action analysis, Maeda does not detect a time delay T2 indicative of time elapsed since disconnection of a slave device. Time delay T2 is simply a period of voltage decay in an R-C circuit after disconnection, during which period Maeda's system is incapable of detecting a disconnection because the voltage has not yet decayed to the "Vol" level that indicates a disconnection. In Maeda, detection of disconnection is defined at time 506, after T2 has elapsed. See Maeda, FIG. 5C; col.8, ln. 26-28.

b. Maeda's T2+T3 is not a predetermined time enabling reconnection of a slave device.

Contrary to the Office Action analysis, Maeda does not teach or suggest a predetermined time T2+T3 for enabling reconnection of a disconnected device. Time T2 is an indefinite decay time dependent on cable capacitance. Maeda, col. 8, ln. 23-26. Time T3 is defined as "time in which the PC 102 can delete the driver for the device." Clearly, Maeda provides T3 as a time interval for *deleting* a device driver, not for reconnecting a disconnected device as claimed by applicants.

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c. The time duration enabling a reconnect is a novel feature not taught by Maeda.

The novelty of the limitation "of a duration to enable a reconnect of the disconnected slave device" is now discussed. The present invention is characterized by measuring "the elapsed time since the *detection* of the disconnection of the disconnected slave device" and not performing uninstallation until the elapsed time exceeds a predetermined time period.

Consider a case where a slave device is accidentally disconnected, and the uninstall process is executed immediately after the disconnection. A user wishing to reconnect the slave device must carry out a time consuming reinstall process.

On the other hand, the present invention does not perform the uninstall process immediately after detecting a disconnection of the slave device. Instead, it performs the uninstall process after a predetermined time period elapses after detection of the disconnection of the disconnected slave device. This feature is supported, for example, in the Claim 1 limitation that begins: "the timing control means controls ...." Accordingly, even if a slave device is disconnected by accident, the slave device can be made available again by simply reconnecting it within the predetermined time period.

On the other hand, Maeda differs from the present invention in the object of measurement. Maeda relies on the difference in voltage levels obtained when the device is in a connected state versus when the device is in a disconnected state. Maeda determines that the device is disconnected when a measured voltage reaches the voltage "Vol" obtained when the slave device is in a disconnected state. Subsequent to making this measurement, Maeda performs the uninstall process. Thus, the uninstall process is

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carried out when the measured voltage reaches a value indicative of a disconnected slave device. This is clearly seen in Maeda, FIG. 9, and in the description pertaining to FIG. 9 at col. 11, ln. 1-16.

Maeda's steps S901 and S902 in FIG. 9 clearly indicate that the process executes uninstallation of the slave device driver immediately upon detecting a low voltage indicative of disconnection, i.e. a voltage not greater than "Vol". Maeda, col. 11, ln. 1-16. Therefore, the uninstallation may be carried out even when it is not desired, for example, when the slave device is disconnected by accident. Therein lies the novelty.

Maeda's system is clearly not designed to allow reconnection after accidental disconnection without having to reinstall device drivers. Note that Maeda's time T2 is on the order of 2.5  $\mu$ s, and that T3 is on the order of ">2.5  $\mu$ s". Maeda, col.8, ln. 8-12 and 31. These time intervals are clearly not selected with human factors in mind. The time required for a human to reconnect a disconnected device, either by manipulating software or by physically reconnecting a device that accidentally becomes unplugged, is on the order of seconds or perhaps minutes or hours.

The present invention, however, addresses this human factors problem directly. See Application at p.14, ln.24 to p.15, ln. 23. One embodiment of the present invention monitors a plurality of predetermined increasing time intervals  $\alpha$ ,  $\beta$ , and  $\gamma$ , so that device drivers and related software may be partially uninstalled in a corresponding plurality of stages, wherein each stage of partial uninstallation corresponds to an increasing level of complexity. See, e.g. Claim 3, and Application at p.23, ln. 13 to p.24, ln.25. In one embodiment, the time period of  $\alpha$  is on the order of 5 seconds,  $\beta$  is on the order of 1 to 10 minutes, and  $\gamma$  is on the order of a hours or days. Application, p.23, ln.13 to p.24, ln.2.

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Moreover, if reconnection occurs before lapsing of one of the  $\alpha$ ,  $\beta$ , or  $\gamma$  time periods, a partial reinstallation of drivers and/or software is initiated at a lower level of complexity than would be required by a full installation. This multi-stage approach based on human factors time periods is not taught or suggested anywhere in Maeda.

### 3. Response to Claim Rejections

In part 5 of the Office Action, Claims 1-3, 9-12, 14-15 and 19-20 stand rejected under 35 USC § 102(b) as being anticipated by EP 0905608AI ("Maeda"). This rejection has been addressed above in section 2.c. To summarize, Maeda fails to anticipate independent Claims 1, 11 and 14, as amended, because each of those claims recites an invention that enables a disconnected slave device to be reconnected if reconnection occurs before a predetermined time period elapses after detection of disconnection. Because Maeda fails to anticipate this limitation, which is present in each of Claims 1, 11 and 14, Maeda cannot form the basis for a rejection under §102. Applicant therefore requests that Claims 1, 11 and 14 be allowed, along with all claims depending therefrom.

In part 7 of the Office Action, Claims 4, 6-8, 13, 16 and 18 stand rejected for obviousness over Maeda in view of USP 5,862,393 ("Davis"). Since each of these claims depends from Claim 1, 11 or 14, Applicant submits that these rejections are moot in view of the allowability of the independent claims.

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In view of all of the above, Applicant respectfully urges allowance of all claims.  
If there are any concerns with regard to this prosecution, or if the Examiner believes that a telephone interview will help further prosecution of the case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

I hereby certify that this correspondence is being transmitted via facsimile to the USPTO at 571-273-8300 on June 8, 2006.

Very truly yours,

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Dated: June 8, 2006

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